

**To:** Deitz, Randy[Deitz.Randy@epa.gov]; Russo, Rebecca[Russo.Rebecca@epa.gov]; StClair, Christie[StClair.Christie@epa.gov]  
**Cc:** Ostrander, David[Ostrander.David@epa.gov]; Stalcup, Dana[Stalcup.Dana@epa.gov]; Williams, Laura[williams.laura@epa.gov]; Smith, Paula[Smith.Paula@epa.gov]; Bassler, Rachel[Bassler.Rachel@epa.gov]; Cohen, Nancy[Cohen.Nancy@epa.gov]; Levine, Carolyn[Levine.Carolyn@epa.gov]; Vaught, Laura[Vaught.Laura@epa.gov]; Card, Joan[Card.Joan@epa.gov]; Distefano, Nichole[DiStefano.Nichole@epa.gov]; McGrath, Shaun[McGrath.Shaun@epa.gov]; Lee, Monica[Lee.Monica@epa.gov]; Natarajan, Nitin[Natarajan.Nitin@epa.gov]; Woolford, James[Woolford.James@epa.gov]; Cheatham, Reggie[cheatham.reggie@epa.gov]; Stanislaus, Mathy[Stanislaus.Mathy@epa.gov]; Hull, George[Hull.George@epa.gov]; Stalcup, Dana[Stalcup.Dana@epa.gov]; Ostrander, David[Ostrander.David@epa.gov]; Zito, Kelly[ZITO.KELLY@EPA.GOV]; Keener, Bill[Keener.Bill@epa.gov]; Maier, Brent[Maier.Brent@epa.gov]; Zito, Kelly[ZITO.KELLY@EPA.GOV]; Gray, David[gray.david@epa.gov]  
**From:** Grantham, Nancy  
**Sent:** Thur 10/15/2015 5:22:27 PM  
**Subject:** RE: COMBINING THREADS: Water Treatment QAs (for media, site visit, external notifications)

We will have region 9 notify the Navajo nation .. Kelly Zito in 9 and David Gray in 6 will do the state, local, tribal and congressional notifications once we have a final statement ready.

Thanks ng

**From:** Deitz, Randy  
**Sent:** Thursday, October 15, 2015 1:17 PM  
**To:** Russo, Rebecca <Russo.Rebecca@epa.gov>; StClair, Christie <StClair.Christie@epa.gov>  
**Cc:** Ostrander, David <Ostrander.David@epa.gov>; Stalcup, Dana <Stalcup.Dana@epa.gov>; Williams, Laura <williams.laura@epa.gov>; Smith, Paula <Smith.Paula@epa.gov>; Bassler, Rachel <Bassler.Rachel@epa.gov>; Cohen, Nancy <Cohen.Nancy@epa.gov>; Levine, Carolyn <Levine.Carolyn@epa.gov>; Vaught, Laura <Vaught.Laura@epa.gov>; Card, Joan <Card.Joan@epa.gov>; Distefano, Nichole <DiStefano.Nichole@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>; McGrath, Shaun <McGrath.Shaun@epa.gov>; Lee, Monica <Lee.Monica@epa.gov>; Natarajan, Nitin <Natarajan.Nitin@epa.gov>; Woolford, James <Woolford.James@epa.gov>; Cheatham, Reggie <cheatham.reggie@epa.gov>; Stanislaus, Mathy <Stanislaus.Mathy@epa.gov>; Hull, George <Hull.George@epa.gov>; Stalcup, Dana <Stalcup.Dana@epa.gov>; Ostrander, David <Ostrander.David@epa.gov>; Zito, Kelly <ZITO.KELLY@EPA.GOV>; Keener, Bill <Keener.Bill@epa.gov>; Maier, Brent <Maier.Brent@epa.gov>  
**Subject:** RE: COMBINING THREADS: Water Treatment QAs (for media, site visit, external notifications)

Thank you for the heads up Rebecca. We definitely need someone to notify the Navajo Nation

(no more delayed notifications) and I think it makes sense to add CDPHE to the list of notifications.

Randy Deitz

Attorney Advisor

Office of Solid Waste and Emergency Response

(202) 566-0197

**From:** Russo, Rebecca

**Sent:** Thursday, October 15, 2015 12:58 PM

**To:** StClair, Christie

**Cc:** Ostrander, David; Stalcup, Dana; Williams, Laura; Smith, Paula; Bassler, Rachel; Cohen, Nancy; Levine, Carolyn; Vaught, Laura; Card, Joan; Distefano, Nichole; Grantham, Nancy; Deitz, Randy; McGrath, Shaun; Lee, Monica; Natarajan, Nitin; Woolford, James; Cheatham, Reggie; Stanislaus, Mathy; Hull, George; Stalcup, Dana; Ostrander, David; Zito, Kelly; Keener, Bill; Maier, Brent

**Subject:** RE: COMBINING THREADS: Water Treatment QAs (for media, site visit, external notifications)

Hi all,

My contact list does not include Navajo Nation or CDPHE. Region 9 has been the lead for notifying Navajo. I can add CDPHE if you would like.

My list does include representatives from Southern Ute and Ute Mountain Ute.

Thanks,

Rebecca

Rebecca A. Russo

Region 8 Congressional and Intergovernmental Liaison

Office: 303-312-6757

Cell: 303-204-1930

**From:** StClair, Christie

**Sent:** Thursday, October 15, 2015 10:23 AM

**Cc:** Ostrander, David; Stalcup, Dana; Williams, Laura; Smith, Paula; Bassler, Rachel; Cohen, Nancy; Levine, Carolyn; Vaught, Laura; Russo, Rebecca; Card, Joan; Distefano, Nichole; Grantham, Nancy; Deitz, Randy; McGrath, Shaun; Lee, Monica; Natarajan, Nitin; Woolford, James; Cheatham, Reggie; Stanislaus, Mathy; Hull, George; Stalcup, Dana; Ostrander, David; Zito, Kelly; Keener, Bill

**Subject:** COMBINING THREADS: Water Treatment QAs (for media, site visit, external notifications)

All,

There are two email threads circulating right now, covering the same ground. I'm combining the cc list for both the Associated Press and Gold King Mine – Water Treatment threads. Please loop anybody else needed.

Here is an updated Q&A for use with current media inquiries (AP and Denver Post both writing on this today), new media inquiries that will come in, today's GKM site visit, and notifications to states, tribes and local stakeholders.

This update deletes contact referrals to CDPHE.

Questions:

1. There are two responses highlighted in green that need final review by David Ostrander, Nancy Grantham and/or OSRTI. I need these approved ASAP for use with media.
2. Will these QAs work as the basis for the statement? Anything else needed?
3. Rebecca Russo is notifying congressionals, states, counties and cities. Are Navajo Nation and CDPHE included in her list? We should notify as soon as the responses are approved.

Nancy and I are meeting in a moment to discuss.

Thanks,

Christie

**Q: Exactly where is the treatment plant going to be installed?**

[Final, approved response] The plant will be installed at the Gladstone, CO command post area, about 10 miles north of Silverton, CO and the junction of Country Rtes 110 and 35.

**Q: How will the plant treat the toxic wastewater? (i.e. what is the exact process by which the toxic material will be removed from the water?)**

[Final, approved response] Here is basic technical information provided by the sub-contractor, based on their experience they are confident that the plant design will achieve:

- Discharging treated water from the system will have a neutral pH in the range of between 6.0 and 9.0 pH units. (pH, or the acidity of a fluid ranges from 0.0 for acid to 14.0 for caustic fluids and neutral is 7.0)
- Dissolved solids will be reduced by removal of metals and formation of metal hydroxide sludge.
- Total solids will be reduced by coagulation, flocculation, and settling through the clarifier.
- Color is currently caused primarily by iron oxidation, and staining is caused both by iron and manganese in the mine water forming precipitates on rocks and in sediments. The treatment process will remove both iron and manganese by more than 90%, reducing the potential for color.

**Q: After treatment, will the water be of high enough quality for drinking?**

[Final, approved response] This plant is not designed to output drinking quality water; see EPA's September 23, 2015 press release for more detail on intent and purpose.

**Q: What is the cleanup rate for total and dissolved metals?**

[NEW info based on Steve Way's email. Needs David Ostrander and OSWER review.] The treatment objective is based on the need to reduce the load from the Gold King mine discharge that is an increased flow from the portal after the Aug. 5, 2015 release. A removal efficiency of 85% for the metals of concern achieves a level within or below the historic loads from the Gold King mine as measured from the portal flow. We anticipate achieving a cleanup rate at or above 85%.

**Q: When will it start operating?**

[Final, approved response] All the major components for the water treatment plant are now on-site. Pipe has been run from the Gold King Mine treatment ponds down to the Gladstone site. We are now connecting all the components, and anticipate that water will start flowing on Friday, Oct. 16. It will then take about a week to fully adjust the treatment system for optimal performance.

**Q: Will the treatment plant address contaminated water spilling from sites other than Gold King Mine?**

[Final, approved response] Please keep in mind that the water treatment plant is addressing only discharge from Gold King Mine. It will make some improvement in water quality in Cement Creek, but is not intended to be a solution to the broader problem of discharging mine in the Upper Animas. Mines in the area have been releasing contaminated mine wastewater into the environment for decades, and addressing the situation is a complicated problem. (The Red and Bonita Mine, for example, continues to discharge at 350 gpm directly into Cement Creek.)

**Q: What are the next steps for long-term improvement to the Upper Animas region?**

[Content taken from OSWER, OSRTI, R9-approved responses, but edited for flow and length. Deletes CDPHE contacts per Joan Card's counsel. Needs NANCY GRANTHAM and OSRTI review.] Although EPA prepared a draft Hazard Ranking System (HRS) report for Cement Creek in 2011, significant new environmental data has been collected since then that needs to be considered.

EPA's immediate focus has been on getting the temporary treatment system constructed and operating at the Gold King Mine. We have already compiled significant data on Cement Creek, and we are actively engaged in discussions with the Colorado Department of Public Health and Environment, Bureau of Land Management and local stakeholders regarding next steps toward long-term solutions. Potential next steps include an updated HRS report and NPL listing.

**Christie St. Clair**

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